

REPLACEMENT CLAIMS

WE CLAIM:

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1. A method for producing a coating or diffusion layer on a substrate for use in contact with a food product or beverage, said coating or diffusion layer preventing or inhibiting passage therethrough of flavour-active or odour-active compounds, and said method comprising applying to the surface of said substrate an effective amount of a copolymer comprising a flexible component and a retentive component, said flexible component being sufficiently flexible to allow the coated substrate to undergo compression and recovery and said retentive component being able to bind with or otherwise retain flavour-active or odour-active compounds.
2. A method according to claim 1, wherein said substrate is selected from the group consisting of a bottle closure, packaging or wrapping material, a bottle and other containers.
3. A method according to claim 1, wherein said substrate is a natural or synthetic cork, and said coating or diffusion layer prevents or inhibits passage of flavour-active or odour-active compounds from said cork to an alcoholic beverage in contact with said cork.
4. A method according to claim 3, wherein said flexible component is sufficiently flexible to allow the coated cork to be compressed and then to recover during a bottling process.
5. A method according to claim 1, wherein said flavour-active compounds are trichloroanisoles (TCA).
6. A method according to claim 1, wherein said copolymer is selected from the group consisting of graft, alternating and block copolymers.
7. A method according to claim 1, wherein said flexible component is formed from silicon-based monomers.

8. A method according to claim 1, wherein said copolymer is selected from the group consisting of polyvinylacetate (PVA) copolymers, polyurethane copolymers and ionomers, terephthalate copolymers, styrene-acrylonitrile (SAN)/ acrylonitrile-butadiene-styrene (ABS) copolymers, (vinylidene) copolymers, epoxy copolymers, amide copolymers, Bisphenol copolymers, Bisphenol A (BPA) - epichlorohydrin copolymers, poly (methyl) methacrylate copolymers, poly(methacrylic acid) copolymers, cellulose copolymers, polyethylene vinyl alcohol copolymers, silane copolymers and siloxane copolymers.

9. A method according to claim 8, wherein said copolymer is a polyvinylacetate (PVA) copolymer.

10. A method according to claim 8, wherein said copolymer is selected from the group consisting of silane and siloxane copolymers, comprising functionalities selected from the group consisting of polyethyleneglycol (PEG), isoprene, butadiene, lactone, amino, terephthalate, amino acid, heterocyclic, hydride (SiH), thiol and epoxy functionalities.

11. A coated substrate produced according to the method of claim 1.

12. A coated cork produced according to the method of claim 1.